

CLAIMS

What is claimed is:

1. A volume control apparatus of a sound output system, the apparatus comprising:
a memory in which sound increase/decrease interval information that a user inputs is stored;

a command and information input unit that inputs the sound increase/decrease interval information and a volume control signal with respect to sound output from the sound output system;

a sound output unit that outputs sound generated in the sound output system to an outside of the sound output system; and

a system control unit that stores the sound increase/decrease interval information input from the command and information input unit in the memory and controls the sound output unit such that sound output from the sound output unit is increased/decreased on a basis of the sound increase/decrease interval information stored in the memory when the volume control signal is received.

2. The apparatus of claim 1, wherein if the sound increase/decrease interval information is input from the command and information input unit, the system control unit stores the sound increase/decrease interval information in the memory when the sound increase/decrease interval is greater than a minimum increase/decrease interval set in the sound output system and less than a maximum increase/decrease interval set in the sound output system.

3. The apparatus of claim 1, wherein the sound increase/decrease interval information is applied to part of an interval of sound that is output from the sound output system.

4. A volume control method of a sound output system, the method comprising:

storing sound increase/decrease interval information that a user wants; and

controlling sound output from the sound output system to increase/decrease sound output on a basis of the sound increase/decrease interval information when a volume control signal is received.

5. The method of claim 4, wherein the storing comprises storing the sound increase/decrease interval information in the memory when the sound increase/decrease interval is greater than a minimum increase/decrease interval set in the sound output system and less than a maximum increase/decrease interval set in the sound output system.

6. The method of claim 4, wherein the storing comprises applying the sound increase/decrease interval information to part of an interval of sound that is output from the sound output system.

7. A volume control apparatus of a sound output system, the apparatus comprising:
a memory in which volume levels selected by a user are sequentially stored in an order selected by the user;
a command and information input unit that inputs the volume levels selected by the user and a volume control signal with respect to sound output from the sound output system;
a sound output unit that outputs sound generated in the sound output system to an outside of the sound output system; and
a system control unit that sequentially stores the volume levels input from the command and information input unit in the memory and controls the sound output unit such that sound output from the sound output unit is increased/decreased on a basis of the order of the volume levels stored in the memory when the volume control signal is received.

8. The apparatus of claim 7, wherein a number of the volume levels storable in the memory is less than a maximum number of volume levels setable by the user in the sound output system.

9. The apparatus of claim 7, wherein values of the volume levels stored in the memory are random.

10. A volume control method of a sound output system, the method comprising:

comparing, if a user selects a volume level, a number of volume levels selected by the user with a maximum number of volume levels setable by the user in the sound output system;

storing, if the number of volume levels selected by the user is smaller than the maximum number of volume levels, the volume levels selected by the user; and
increasing the number of volume levels selected by the user by one.

11. The method of claim 10, further comprising controlling a volume level of sound output from the sound output system on a basis of an order in which volume levels selected by the user are stored, when the user inputs a volume control signal.

12. The method of claim 10, wherein the volume level selected by the user corresponds to a sound level that the user wants, between a minimum sound level and a maximum sound level that may be output from the sound output system regardless of a previously selected volume level.

13. A volume control apparatus of a sound output system, the apparatus comprising:
a sound control unit, to store sound increase/decrease interval information input from a user, and to control a sound output unit such that sound output from the sound output unit is increased/decreased on a basis of the sound increase/decrease interval information stored; and
a sound output unit that outputs sound generated in the sound output system to an outside of the sound output system in accordance with the sound increase/decrease interval information.

14. The apparatus of claim 13, wherein the sound control unit comprises:
a memory in which the sound increase/decrease interval information that the user inputs is stored;
a command and information input unit that inputs the sound increase/decrease interval information and a volume control signal with respect to sound output from the sound output system; and
a system control unit that stores, in the memory, the sound increase/decrease interval information input from the command and information input unit and controls the sound output unit such that sound output from the sound output unit is increased/decreased on a basis of the sound increase/decrease interval information stored in the memory when the volume control signal is received.

15. The apparatus of claim 14, wherein if the sound increase/decrease interval information is input from the command and information input unit, the system control unit stores the sound increase/decrease interval information in the memory when the sound increase/decrease interval is greater than a minimum increase/decrease interval set in the sound output system and less than a maximum increase/decrease interval set in the sound output system.

16. The apparatus of claim 15, wherein the sound increase/decrease interval information is applied to part of an interval of sound that is output from the sound output system.

17. A volume control method of a sound output system, the method comprising:
storing sound increase/decrease interval information input from a user; and
controlling a sound output unit such that sound output from the sound output unit is increased/decreased on a basis of the sound increase/decrease interval information stored.

18. The method of claim 17, wherein the storing of the sound increase/decrease interval information input from the user comprises:

comparing the sound increase/decrease interval information with a minimum increase/decrease interval set in the sound output system and a maximum increase/decrease interval set in the sound output system, and

if the sound increase/decrease interval information is greater than the minimum increase/decrease interval set in the sound output system and less than the maximum increase/decrease interval set in the sound output system, storing the input sound increase/decrease interval information in a memory.

19. The method of claim 17, wherein the controlling of the sound output unit such that sound output from the sound output unit is increased/decreased on a basis of the sound increase/decrease interval information stored comprises:

inputting, by the user, the sound increase/decrease interval information;
inputting a volume control signal with respect to sound output from the sound output system; and
using the stored sound increase/decrease interval information to control sound output from the sound output unit.

20. The method of claim 19, wherein the using of the stored sound increase/decrease interval information to control sound output from the sound output unit comprises:

applying the sound increase/decrease interval information to part of an interval of sound that is output from the sound output system.

21. A volume control apparatus of a sound output system, the apparatus comprising:
a sound control unit that stores volume levels selected by a user sequentially in an order selected by the user, and, upon inputting a volume control signal with respect to sound output, controls the sound output from the sound output unit on a basis of the volume levels stored sequentially; and

a sound output unit that outputs sound generated in the sound output system to an outside of the sound output system.

22. The apparatus of claim 21, wherein the sound control unit comprises:
a memory in which the volume levels selected by the user are sequentially stored;
a command and information input unit that inputs the volume levels selected by the user and the volume control signal with respect to sound output from the sound output system; and
a system control unit that sequentially stores the volume levels input from the command and information input unit in the memory and controls the sound output unit such that sound output from the sound output unit is increased/decreased on a basis of the order of the volume levels stored in the memory when the volume control signal is input.

23. The apparatus of claim 22, wherein a number of the volume levels storable in the memory is less than a maximum number of volume levels setable by the user in the sound output system.

24. The apparatus of claim 22, wherein values of the volume levels stored in the memory are random.

25. A volume control method of a sound output system, the method comprising:

setting, by a user, a maximum number of volume levels; and

storing each volume level selected by the user until the maximum number of volume levels is obtained.

26. The method of claim 25, further comprising controlling a volume level of sound output from the sound output system on a basis of an order in which volume levels selected by the user are stored.

27. The method of claim 25, further comprising limiting the volume levels selectable by the user to a sound level between a minimum sound level and a maximum sound level that is output from the sound output system.

28. The method of claim 27, wherein the volume levels selectable by the user are independent of a previously selected volume level.